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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _24 July 2007_.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-3 and 5-62_ is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-3 and 5-62_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _16 December 2003_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a) ☐ All b) ☒ Some * c) ☐ None of:

　　1. ☐ Certified copies of the priority documents have been received.

　　2. ☒ Certified copies of the priority documents have been received in Application No. _09/5900906_.

　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/02/2006 has been entered.

Remarks

2. Receipt of Applicant's Amendment, filed on 07/24/2007, is acknowledged. The amendment includes the cancellation of the claim 4, the amending of claims 1-3, 5-6, 8-9, 41-49, and 55-60, and the addition of claim 61-62.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/590096, filed on 06/09/2000.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the phrase "the content management system **enables**" is indefinite.

Claims 2-3, and 5-62 are rejected for incorporating the deficiencies of independent claim 1.

Claim Objections

6. Claim 57 is objected to because of the following informalities: The phrase "wherein an action selected fro the group consisting" should be changed to "wherein an action is selected from the group consisting". Appropriate correction is required.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1-2, and 5-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gill** (U.S. Patent 6,947,959) in view of **Lebling et al.** (U.S. Patent 6,141,007).

9.   Regarding claim 1, **Gill** teaches a content management system comprising:

A) data storing means, data retrieving means and data processing means (Column 5, lines 35-42, Figure 1);

B) a database system adapted to store publishing content objects (PCOs)_, wherein the PCOs have associated_ metadata _and may include PCO content data, wherein the PCO content data, if present, is configured to be media neutral_ (Column 7, lines 28-37);

C) a plurality of workstation configured for performing at least one function selected from the group consisting of inputting PCO content data, modifying PCO content data, inputting PCO metadata and modifying PCO metadata (Column 5, lines 45-49, Column 7, lines 38-57).

The examiner notes that **Gill** teaches **"data storing means, data retrieving means and data processing means"** as "The client-server architecture of the present invention is based on a threelayer structure: a database/storage layer, where the the digital assets representing pictures, sounds, text and other media data and the metadata that describe them reside; a server layer, from which assets are controlled and managed; and a client/interface layer, where users interact with assets by such actions as organizing, checking in, searching, and checking out" (Column 5, lines 35-42). The examiner further notes that **Gill** teaches **"a database system adapted to**

store publishing content objects (PCOs)**, wherein the PCOs have associated metadata and may include PCO content data, wherein the PCO content data, if present, is configured to be media neutral**" as "The main Server 1 application performs the cataloguing, storage, indexing and tracking of the digital assets. It not only stores the digital assets in the Database 4 and/or File Servers 7, but also creates and stores information about the digital assets in the Database 4. The information about the digital assets, referred to as "metadata", is critical in managing the digital assets. The Server 1 gathers, organizes and stores the metadata in a manner to create an efficient process for storing and searching for this information about the digital assets" (Column 26, lines 53-56). The examiner further notes that **Gill** teaches "**a plurality of workstation configured for performing at least one function selected from the group consisting of inputting PCO content data, modifying PCO content data, inputting PCO metadata and modifying PCO metadata**" as "The client server architecture of the present invention allows the communication between several client and servers components located over different hardware and software platforms with a centralized database or file server" (Column 5, lines 45-49) and "The metadata about each of the digital assets, in the preferred embodiment, is gathered in two processes. The first process is performed automatically by the Server 1 itself. The Server 1 automatically gathers information and generates the corresponding metadata on such information as file type, size, dates of creation and modification, versions, and file-type-specific information such as image resolution and word counts. Other information may be automatically generated by the Server 1 as well. The Server 1 gathers defined information that must be gathered as well as user definable information. The server administrator can configure the Server 1 to gather additional information if desired. The second process of gathering the metadata is entered by the user. The user-supplied metadata may include such information as the identity of the user, the status of the asset, category of the asset, keywords to be applied to the asset, a text description of the asset or other information. The Server 1 can be configured to require such information to be entered by the user before the digital asset can be checked in" (Column 7, lines 38-57).

Gill does not explicitly teach:

D) <u>wherein</u> the content management system <u>enables</u> planning <u>an expected</u> usage of <u>a</u> <u>PCO by defining and maintaining a relation between each PCO and at least on news</u> <u>media product</u>; and

E) <u>further</u> wherein the <u>content management system enables</u> coordinating <u>the relation in</u> <u>response to modification of PCO content data or modification of the PCO metadata to</u> <u>adapt the news media product to reflect changes in the PCO</u>.

Lebling, however, teaches **"<u>wherein</u> the content management system <u>enables</u> planning <u>an expected</u> usage of <u>a PCO by defining and maintaining a</u> <u>relation between each PCO·and at least on news media product</u>"** as "In the main application window 30 shown in FIG. 2, the queue entitled "RUNDOWN" 35 has been selected from a folder named "630P" 37 in the directory panel 32, by the user placing the cursor over the queue name and single clicking with a mouse or other pointing device on the queue name while the directory panel is in focus. The user can then open the "RUNDOWN" queue by double-clicking on the queue name. Opening a directory in the directory panel 32 causes the queue for that file being displayed in the queue panel 34 and the focus to switch to the queue panel 34. The queue panel displays the list of stories for a particular broadcast, including format and timing information for each story. The story panel 36 displays text for the particular stories, such as the text from the story "MIDWEST DAMAGE," which is shown as selected in the queue panel 34. The text which is displayed in the story panel 36 may also be sent, via the network 26, to a teleprompter 27 to be read by the news anchorperson during the broadcast" (Column 4, lines 45-62), and **"<u>further</u> wherein the <u>content management system enables</u> coordinating <u>the relation in response to modification of PCO content data or</u> <u>modification of the PCO metadata to adapt the news media product to reflect</u> <u>changes in the PCO</u>"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the

different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 2, **Gill** further teaches a content management system comprising:

A) wherein the <u>PCO content data is</u> arranged to be media neutral by comprising content elements divided by their function (Column 8, line 24).

The examiner notes that **Gill** teaches **"wherein the <u>PCO content data is</u> arranged to be media neutral by comprising content elements divided by their function"** as "Type Selection For example: PICT, Quick- Time movie, QuarkXPress document" (Column 8, line 24).

Regarding claim 5, **Gill** does not explicitly teach a content management system comprising:

A) wherein planning <u>the expected</u> usage of <u>a PCO</u> comprises tentative or dynamic planning and coordinating of usage of the PCOs and/or fixed planning and coordinating of usage of the PCOs.

Lebling, however, teaches **"wherein planning <u>the expected</u> usage of <u>a PCO</u> comprises tentative or dynamic planning and coordinating of usage of the PCOs and/or fixed planning and coordinating of usage of the PCOs"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for

editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 6, **Gill** does not explicitly teach a content management system comprising:
A) wherein the planning and coordinating of usage of PCOs comprises approximate and/or specific placement of PCOs, said placement referring to physical or visual location of PCOs in one or more planned <u>news media products</u>.

Lebling, however, teaches **"wherein the planning and coordinating of usage of PCOs comprises approximate and/or specific placement of PCOs, said placement referring to physical or visual location of PCOs in one or more planned <u>news media products</u>"** as "Users with write privileges may directly edit story fields

without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 7, **Gill** does not explicitly teach a content management system comprising:

A) wherein the planning and coordinating of usage of PCOs comprises planning and coordinating of PCOs that are only planned for creation or still under creation or already existing PCOs.

Lebling, however, teaches **"wherein the planning and coordinating of usage of PCOs comprises approximate and/or specific placement of PCOs, said placement referring to physical or visual location of PCOs in one or more planned news media products"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In

the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 8, **Gill** further teaches a content management system comprising:

A) wherein the PCO content data comprises content of types used in news media selected from the group consisting of: daily or weekly newspapers, magazines, TV and radio stations, Internet sites and other electronic news media (Column 19, lines 27-33).

The examiner notes that **Gill** teaches **"wherein the PCOs comprise content of types used in news media selected from the group consisting of: daily or weekly newspapers, magazines, TV and radio stations, Internet sites and other electronic news media"** as "An example of a user view is illustrated in FIG. 16. Let us suppose an user, such as an image-editing technician, who is required to color correct a number of images that are being used in a variety of magazines within a publishing company. The only common relationship between these images is that the user must color correct

them. There is no other relationship between these images or assets" (Column 19, lines 27-33).

Regarding claim 9, **Gill** does not explicitly teach a content management system comprising:

A) wherein the planning and coordinating of usage of PCOs is performed by associating PCOs and information relating to PCOs with one or more layout budgets or lists, each layout budget or list having at least one publication associated with it, and each layout budget or list representing the planned content of the associated publication(s) or a part or section thereof.

Lebling, however, teaches **"wherein the planning and coordinating of usage of PCOs is performed by associating PCOs and information relating to PCOs with one or more layout budgets or lists, each layout budget or list having at least one publication associated with it, and each layout budget or list representing the planned content of the associated publication(s) or a part or section thereof"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue

panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

The examiner notes that Figure 2 of **Lebling** clearly shows the planning of various PCO data in a layout budget for a news broadcast.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 10, **Gill** does not explicitly teach a content management system comprising:
A) wherein layout budgets or lists have at least one publication date and/or time associated with them, the publication date and/or time indicating the publication date and/or time of a publication associated with the layout budget or list.

Lebling, however, teaches **"wherein layout budgets or lists have at least one publication date and/or time associated with them, the publication date and/or time indicating the publication date and/or time of a publication associated with the layout budget or list"** as "the queue is presented in a window 60 on the left side of

the panel and the content of a selected story is presented in a window 62 on the right side of the panel. FIG. 7B shows a timing mode of the queue panel 31. In the timing mode, the queue panel 34 shows a view of the timing information of the particular stories in the queue. This view may be used by the producer of the news broadcast. FIG. 7C shows an on-air mode of the queue panel 34. In the on-air mode, the queue panel 34 shows a view which may be used by the director of the news broadcast, which shows information of the stories, including the run time of a series of stories as well as other information which the director may need" (Column 7, lines 64-67-Column 8, lines 1-8).

The examiner notes that Figure 2 of **Lebling** clearly shows the time of the PCO data in a layout budget for a news broadcast.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 11, **Gill** does not explicitly teach a content management system comprising:
A) wherein PCOs are added to or removed from layout budgets or lists or wherein information relating to PCOs is changed on layout budgets or lists, thereby facilitating dynamic planning of content intended for use in publications.

Lebling, however, teaches **"wherein PCOs are added to or removed from layout budgets or lists or wherein information relating to PCOs is changed on layout budgets or lists, thereby facilitating dynamic planning of content intended for use in publications"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the

pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 12, **Gill** does not explicitly teach a content management system comprising:

A) wherein metadata are used for approving or suspending PCOs associated with layout budgets or lists, thereby facilitating tentative or preliminary planning of individual PCOs intended for use in publications.

Lebling, however, teaches **"wherein metadata are used for approving or suspending PCOs associated with layout budgets or lists, thereby facilitating tentative or preliminary planning of individual PCOs intended for use in publications"** as "Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 10, lines 22-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 13, **Gill** further teaches a content management system comprising:

A) means for filtering or sorting of PCOs based on their metadata, thereby facilitating presentation of an output according to said filtering or sorting (Column 17, lines 18-26).

The examiner notes that **Gill** teaches **"means for filtering or sorting of PCOs based on their metadata, thereby facilitating presentation of an output according to said filtering or sorting"** as "The Accessories features also include a "Sort By" accessory that lets the user specify how the sequence of assets will be displayed. The user specifies a header field, such as "Created By" or "File Type". The invention then displays the list of returned assets sorted by the information found in the specified header fields. For example, if a user specified that the list be sorted and displayed by

"File Name", then the invention would display the list of returned assets in sequence by their File Names" (Column 17, lines 18-26).

Regarding claim 14, **Gill** further teaches a content management system comprising:

A) wherein the metadata are used for ranking or prioritizing PCOs by associating one rank or priority out of a plurality of ranks or priorities with the metadata for a given PCO (Column 17, lines 18-26).

The examiner notes that **Gill** teaches **"wherein the metadata are used for ranking or prioritizing PCOs by associating one rank or priority out of a plurality of ranks or priorities with the metadata for a given PCO"** as "The Accessories features also include a "Sort By" accessory that lets the user specify how the sequence of assets will be displayed. The user specifies a header field, such as "Created By" or "File Type". The invention then displays the list of returned assets sorted by the information found in the specified header fields. For example, if a user specified that the list be sorted and displayed by "File Name", then the invention would display the list of returned assets in sequence by their File Names" (Column 17, lines 18-26).

Regarding claim 15, **Gill** further teaches a content management system comprising:

A) means for arranging the ranks or priorities of PCOs in a hierarchical structure (Column 18, lines 1-12).

The examiner notes that **Gill** teaches **"means for arranging the ranks or priorities of PCOs in a hierarchical structure"** as "The Grouped mode 42 is used to display asset grouped in folder according their respective asset class, as seen in FIG. 11. The Layout and Reverse Layout mode, 44 and 45, displays the relationships between assets and classes of assets. The Header mode displays assets by listing all header fields, as in FIG. 21, or by showing the low-resolution thumbnail for each asset, as in FIG. 20. Userview mode is explained in detail below. Additionally you have two browse modes: the Relation and the Revisions mode. The Relation mode displays all

relations between assets. The Revisions mode 46 displays the revisions for each of those assets" (Column 18, lines 1-12).

Regarding claim 16, **Gill** further teaches a content management system comprising:

A) means for associating a size with each PCO, the size indicating physical or visual space or time duration of the PCO when appearing in a publication (Column 7, lines 38-50, Column 8, lines 27-28).

The examiner notes that **Gill** teaches **"means for associating a size with each PCO, the size indicating physical or visual space or time duration of the PCO when appearing in a publication"** as "The metadata about each of the digital assets, in the preferred embodiment, is gathered in two processes. The first process is performed automatically by the Server 1 itself. The Server 1 automatically gathers information and generates the corresponding metadata on such information as file type, size, dates of creation and modification, versions, and file-type-specific information such as image resolution and word counts. Other information may be automatically generated by the Server 1 as well. The Server 1 gathers defined information that must be gathered as well as user definable information. The server administrator can configure the Server 1 to gather additional information if desired" (Column 7, lines 38-50) and "Size Number File size, plus dimensions and resolution (if applicable" (Column 8, lines 27-28).

Regarding claim 17, **Gill** further teaches a content management system comprising:

A) means for associating a size with each PCO, the size indicating actual measured size or a planned size of the PCO when appearing in a publication (Column 7, lines 38-50, Column 8, lines 27-28).

The examiner notes that **Gill** teaches **"means for associating a size with each PCO, the size indicating actual measured size or a planned size of the PCO when appearing in a publication"** as "The metadata about each of the digital assets, in the

preferred embodiment, is gathered in two processes. The first process is performed automatically by the Server 1 itself. The Server 1 automatically gathers information and generates the corresponding metadata on such information as file type, size, dates of creation and modification, versions, and file-type-specific information such as image resolution and word counts. Other information may be automatically generated by the Server 1 as well. The Server 1 gathers defined information that must be gathered as well as user definable information. The server administrator can configure the Server 1 to gather additional information if desired" (Column 7, lines 38-50) and "Size Number File size, plus dimensions and resolution (if applicable" (Column 8, lines 27-28).

Regarding claim 18, **Gill** does not explicitly teach a content management system comprising:

A) wherein a layout budget or list has a predefined maximum total size indicating the space or time available within a publication or a part or a section thereof being associated with the layout budget or list.

Lebling, however, teaches **"wherein a layout budget or list has a predefined maximum total size indicating the space or time available within a publication or a part or a section thereof being associated with the layout budget or list"** as "Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 10, lines 15-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching

Lebling's would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 19, **Gill** further teaches a content management system comprising:
A) wherein at least one workstation provides access to the database system and all PCOs managed in the database system, irrespective of the storage location of any particular PCO (Column 13, lines 4-13).

The examiner notes that **Gill** teaches **"wherein at least one workstation provides access to the database system and all PCOs managed in the database system, irrespective of the storage location of any particular PCO"** as "Each client of the preferred embodiment of the present invention includes a core set of features as well as possible additional features unique to each client component. The core set of features includes the ability to check in assets, find assets within the Database 4 and the File Systems 7, retrieve the assets, use the assets and check the assets back in after use or revisions. The core set of features also allows relations between the assets to be assigned to keep track of relationships between assets. These features are discussed in greater detail below" (Column 13, lines 4-13).

Regarding claim 20, **Gill** further teaches a content management system comprising:
A) wherein the database system comprises a plurality of databases (Column 6, lines 8-15).

The examiner notes that **Gill** teaches **"wherein the database system comprises a plurality of databases"** as "The communication between the server 1 and the database 4 which can be installed on a different machine located over the network is realized through a portable proprietor layer, the Quark Data Interface 5 (QDI) component. The QDI component is used to interface the server with the databases through their native interface protocols, such as the Oracle Call Interface 6 (OCI) or the ODBC (Open Database Connectivity)" (Column 6, lines 8-15).

Regarding claim 21, **Gill** further teaches a content management system comprising:

A) wherein the plurality of databases is physically or geographically disparate (Column 22, lines 10-21).

The examiner notes that **Gill** teaches **"wherein the plurality of databases is physically or geographically disparate"** as "The Administrator can configure storage rules for the main server application and each of the server agents B1 and B2. These rules may, by way of example, cause assets originating in New York to be stored in hard disk a, cluster A or cluster B; assets created by users and group is in Tokyo to be stored in hard disk m, hard disk n, cluster X or cluster Y. Since assets typically will be used more often by the users who created them, the local storage improves the speed of access to those users. However, those assets still remain under the control of the main server application in New York and can be moved from one location to another at any time" (Column 22, lines 10-21).

Regarding claim 22, **Gill** further teaches a content management system comprising:

A) wherein each database of the plurality of databases is adapted to store PCOs and associated metadata for a particular enterprise or a branch of an enterprise (Column 22, lines 10-21).

The examiner notes that **Gill** teaches **"wherein each database of the plurality of databases is adapted to store PCOs and associated metadata for a particular enterprise or a branch of an enterprise"** as "The Administrator can configure storage rules for the main server application and each of the server agents B1 and B2. These rules may, by way of example, cause assets originating in New York to be stored in hard disk a, cluster A or cluster B; assets created by users and group is in Tokyo to be stored in hard disk m, hard disk n, cluster X or cluster Y. Since assets typically will be used more often by the users who created them, the local storage improves the speed of access to those users. However, those assets still remain under the control of the

main server application in New York and can be moved from one location to another at any time" (Column 22, lines 10-21).

Regarding claim 23, **Gill** further teaches a content management system comprising:

A) wherein each database of the plurality of databases comprises a searchable index of the metadata and/or content associated with the PCOs stored in that database (Column 15, lines 46-61).

The examiner notes that **Gill** teaches **"wherein each database of the plurality of databases comprises a searchable index of the metadata and/or content associated with the PCOs stored in that database"** as "In order to use digital assets that are under the control of the present invention, the user must be able to efficiently retrieve the digital assets. The present invention, in the preferred embodiment, provides a process to search, retrieve and use these digital assets. The search process, referred to as a "query", is a request for a list of all assets that meet specific criteria. Once this list is generated, then the user must be able to determine if the desired digital assets are on this list. The user should also be able to organize this list for efficient use. The preferred embodiment of the present invention utilizes a "query palette" 42 to present the list of digital assets that meet the user's criteria in a manner that allows the user to efficiently use this list. It is to be expressly understood that other search techniques are used under the present invention. For example, the present invention is also able to search and retrieve stored assets by full file searches of the digital asset, such as full text search of text files" (Column 15, lines 45-61).

Regarding claim 24, **Gill** further teaches a content management system comprising:

A) wherein the searchable indices are synchronised into a consolidated index, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases (Column 15, lines 46-61).

The examiner notes that **Gill** teaches **"wherein the searchable indices are synchronised into a consolidated index, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases"** as "In order to use digital assets that are under the control of the present invention, the user must be able to efficiently retrieve the digital assets. The present invention, in the preferred embodiment, provides a process to search, retrieve and use these digital assets. The search process, referred to as a "query", is a request for a list of all assets that meet specific criteria. Once this list is generated, then the user must be able to determine if the desired digital assets are on this list. The user should also be able to organize this list for efficient use. The preferred embodiment of the present invention utilizes a "query palette" 42 to present the list of digital assets that meet the user's criteria in a manner that allows the user to efficiently use this list. It is to be expressly understood that other search techniques are used under the present invention. For example, the present invention is also able to search and retrieve stored assets by full file searches of the digital asset, such as full text search of text files" (Column 15, lines 45-61).

Regarding claim 25, **Gill** further teaches a content management system comprising:

A) wherein a central searchable index of metadata and/or content associated with the PCOs stored in the plurality of databases is provided, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases (Column 15, lines 46-61).

The examiner notes that **Gill** teaches **"wherein a central searchable index of metadata and/or content associated with the PCOs stored in the plurality of databases is provided, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases"** as "In order to use digital assets that are under the control of the present invention, the user must be able to efficiently retrieve the digital assets. The present invention, in the preferred embodiment, provides a process to search, retrieve and use these digital assets. The search process, referred to as a "query", is a request for a list of all assets that meet specific criteria. Once this list

is generated, then the user must be able to determine if the desired digital assets are on this list. The user should also be able to organize this list for efficient use. The preferred embodiment of the present invention utilizes a "query palette" 42 to present the list of digital assets that meet the user's criteria in a manner that allows the user to efficiently use this list. It is to be expressly understood that other search techniques are used under the present invention. For example, the present invention is also able to search and retrieve stored assets by full file searches of the digital asset, such as full text search of text files" (Column 15, lines 45-61).

Regarding claim 26, **Gill** further teaches a content management system comprising:

A) wherein a consolidated access to or view of PCOs is provided, irrespective of their storage location or database (Column 8, lines 55-67-Column 6, lines 1-8).

The examiner notes that **Gill** teaches **"wherein a consolidated access to or view of PCOs is provided, irrespective of their storage location or database"** as "Access to header fields is regulated by "privileges". Privileges determine which users have what level of access to which assets and features. The present invention implements privileges in terms of users, roles, groups, and access control lists. A user is a logon name and a corresponding password that are registered with the Server. A role is a set of privileges that determines which assets a user can access and which commands they can use. For example, privileges for a role called "Image-Editing Technician" might allow check-in and check-out of picture files but prevent check-in or check-out of QuarkXPress layouts. An "Editor" role might allow full access to all text files, but prevent anything but read-only access to picture files. To grant the appropriate privileges to the appropriate people, all an administrator needs to do is apply the "Image-Editing Technician" and "Editor" roles to the appropriate users. A group is simply a named list of users. Access control lists are sets of access privileges specific to a particular asset. Access control lists determine which users and groups may have what kind of access to that asset" (Column 8, lines 55-67-Column 6, lines 1-8).

Regarding claim 27, **Gill** further teaches a content management system comprising:

A) means to support users from at least one workstation to perform the management task of tracking the status of one or more PCOs (Column 7, lines 28-37).

The examiner notes that **Gill** teaches **"means to support users from at least one workstation to perform the management task of tracking the status of one or more PCOs"** as "The main Server 1 application performs the cataloguing, storage, indexing and tracking of the digital assets. It not only stores the digital assets in the Database 4 and/or File Servers 7, but also creates and stores information about the digital assets in the Database 4. The information about the digital assets, referred to as "metadata", is critical in managing the digital assets. The Server 1 gathers, organizes and stores the metadata in a manner to create an efficient process for storing and searching for this information about the digital assets" (Column 8, lines 28-37).

Regarding claim 28, **Gill** does not explicitly teach a content management system comprising:

A) means to support users to perform, from at least one workstation, the management task of associating metadata with one of a plurality of desk budgets, the desk budgets providing a list of PCOs that are planned or under creation within a given desk or department (Figure 2, Column 20, lines 2-7).

Lebling, however, teaches **"means to support users to perform, from at least one workstation, the management task of associating metadata with one of a plurality of desk budgets, the desk budgets providing a list of PCOs that are planned or under creation within a given desk or department"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode

causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29).

The examiner notes that Figure 2 of **Lebling** clearly shows the planning of various PCO data in a layout budget for a news broadcast.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 29, **Gill** further teaches a content management system comprising:

A) means for supporting users from at least one workstation to perform the management task of organising PCOs into groupings (Column 13, lines 37-48).

The examiner notes that **Gill** teaches **"means for supporting users from at least one workstation to perform the management task of organising PCOs into groupings"** as The present invention has the ability to check in a single asset or to group related assets together as a single asset. This unique feature enables an user to manage a group of assets which are applied together in a single use and even "deconstruct" the items within an active document into individual assets. An example of this may be a document which contains several items such as text files and/or graphic files. The individual text files may be checked in as individual assets as well as the individual graphic files. Also, one or more of the text files may be grouped with one or more related graphic files and the combination may be saved as an asset" (Column 13, lines 37-48).

Regarding claim 30, **Gill** further teaches a content management system comprising:

A) wherein the means for organising PCOs into groupings comprises means for defining projects or projects and sub-projects in the content management system (Column 22, lines 66-67-Column 23, lines 1-6); and

B) means for including one or more PCOs in one or more projects or sub-projects, thereby facilitating an overview of PCOs involved in larger news events (Column 13, lines 8-24, Column 26, lines 53-63).

The examiner notes that **Gill** teaches **"wherein the means for organising PCOs into groupings comprises means for defining projects or projects and sub-projects in the content management system"** as "The invention also provides User Views to group references or icons representing selected assets in order to organize the references to the assets without affecting the organization of the assets themselves. These grouping of references can be shared for collaborative projects. Another feature

of the User Views is the use of Action Folders. This feature allows scripted actions to be applied to assets at scheduled times" (Column 22, lines 66-67-Column 23, lines 1-6). The examiner further notes that **Gill** teaches **"means for including one or more PCOs in one or more projects or sub-projects, thereby facilitating an overview of PCOs involved in larger news events"** as "The invention also provides User Views to group references or icons representing selected assets in order to organize the references to the assets without affecting the organization of the assets themselves. These grouping of references can be shared for collaborative projects. Another feature of the User Views is the use of Action Folders. This feature allows scripted actions to be applied to assets at scheduled times" (Column 22, lines 66-67-Column 23, lines 1-6).

Regarding claim 31, **Gill** further teaches a content management system comprising:
A) means for arranging the projects and sub-projects in a hierarchical structure (Column 18, lines 1-12).

The examiner notes that **Gill** teaches **"means for arranging the projects and sub-projects in a hierarchical structure"** as "The Grouped mode 42 is used to display asset grouped in folder according their respective asset class, as seen in FIG. 11. The Layout and Reverse Layout mode, 44 and 45, displays the relationships between assets and classes of assets. The Header mode displays assets by listing all header fields, as in FIG. 21, or by showing the low-resolution thumbnail for each asset, as in FIG. 20. Userview mode is explained in detail below. Additionally you have two browse modes: the Relation and the Revisions mode. The Relation mode displays all relations between assets. The Revisions mode 46 displays the revisions for each of those assets" (Column 18, lines 1-12).

Regarding claim 32, **Gill** does not explicitly teach a content management system comprising:
A) means for filtering PCOs by project or sub-project, thereby facilitating a presentation of PCOs related to the project or sub-project.

Lebling, however, teaches **"means for filtering PCOs by project or sub-project, thereby facilitating a presentation of PCOs related to the project or sub-project"** as "the queue is displayed in a "sorted" mode according to one of the fields in the queue. Typically the queue is sorted based on the order of the stories in the broadcast. In this case, the stories are sorted according the "Page" field in the queue. If stories within the queue must be reordered, due to time constraints, broadcast changes, etc., the user may override the "sorted" mode to reorder the stories. The "sorted" mode is overridden by selecting the "Order" command from the menu bar 38. Selecting the "Order" command puts the queue into an "order" mode. This enables the user to select and move stories within the queue using conventional drag and drop methodology. Once a story is selected, it may be dragged to a different insertion point in the queue. If the dragging extends above or below the top or bottom edge of the queue panel 34, scrolling occurs, enabling the user to access insertion points beyond the display of the queue panel 34. When a story is moved within the queue, the backtime field is updated to compensate for the change in the order of different length stories. Furthermore, the field names may be changed and new fields may be added or existing ones removed. The alignment of text within fields may be varied and the display size of fields may be changed" (Column 8, lines 57-67-Column 9, lines 1-12).

The examiner notes that Figure 2 of **Lebling** clearly shows the planning of various PCO data in a layout budget for a news broadcast.
It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 33, **Gill** further teaches a content management system comprising:
A) wherein metadata are associated with projects or sub-projects, thereby providing information relating to the project or sub-project (Column 22, lines 66-67-Column 23, lines 1-6).

The examiner notes that **Gill** teaches **"wherein metadata are associated with projects or sub-projects, thereby providing information relating to the project or sub-project"** as "The invention also provides User Views to group references or icons representing selected assets in order to organize the references to the assets without affecting the organization of the assets themselves. These grouping of references can be shared for collaborative projects. Another feature of the User Views is the use of Action Folders. This feature allows scripted actions to be applied to assets at scheduled times" (Column 22, lines 66-67-Column 23, lines 1-6).

Regarding claim 34, **Gill** further teaches a content management system comprising:
A) wherein at least part of the metadata associated with a given project or sub-project is applied to the PCOs included in that project or sub-project (Column 22, lines 66-67-Column 23, lines 1-6).

The examiner notes that **Gill** teaches **"wherein at least part of the metadata associated with a given project or sub-project is applied to the PCOs included in that project or sub-project"** as "The invention also provides User Views to group references or icons representing selected assets in order to organize the references to the assets without affecting the organization of the assets themselves. These grouping of references can be shared for collaborative projects. Another feature of the User Views is the use of Action Folders. This feature allows scripted actions to be applied to assets at scheduled times" (Column 22, lines 66-67-Column 23, lines 1-6)

Regarding claim 35, **Gill** further teaches a content management system comprising:
A) wherein the means for organising PCOs into groupings comprises means for associating a selected plurality of PCOs, irrespective of other groupings in which they might be included, so as to form an association, thereby facilitating any subject, topical or other desired relationship between PCOs (Column 13, lines 37-48).

The examiner notes that **Gill** teaches **"wherein the means for organising PCOs into groupings comprises means for associating a selected plurality of PCOs, irrespective of other groupings in which they might be included, so as to form an association, thereby facilitating any subject, topical or other desired relationship between PCOs"** as The present invention has the ability to check in a single asset or to group related assets together as a single asset. This unique feature enables an user to manage a group of assets which are applied together in a single use and even "deconstruct" the items within an active document into individual assets. An example of this may be a document which contains several items such as text files and/or graphic files. The individual text files may be checked in as individual assets as well as the individual graphic files. Also, one or more of the text files may be grouped with one or more related graphic files and the combination may be saved as an asset" (Column 13, lines 37-48).

Regarding claim 36, **Gill** further teaches a content management system comprising:
A) means for filtering PCOs by association, thereby facilitating a presentation of associated PCOs (Column 9, lines 48-55).

The examiner notes that **Gill** teaches **"means for filtering PCOs by association, thereby facilitating a presentation of associated PCOs"** as "The preferred embodiment of the present invention organizes the asset classes 18 into a hierarchy 19 (level-based relationship) wherein asset classes can "contain" other asset classes. The phrase "contain" refers to a hierarchical association between the asset classes. A upper level asset class may have another asset level assigned to it. An asset class is able to "inherit" the header fields of another asset class to which it is assigned" (Column 26, lines 53-54).

Regarding claim 37, **Gill** further teaches a content management system comprising:

A) means for linking between a PCO and any of its associated PCOs, thereby facilitating automatic or simplified maintenance of link relationships between associated PCOs (Column 22, lines 49-57).

The examiner notes that **Gill** teaches **"means for linking between a PCO and any of its associated PCOs, thereby facilitating automatic or simplified maintenance of link relationships between associated PCOs"** as "The present invention, in a preferred embodiment, allows a user to check in assets, either on an individual basis, as a group of related assets, or even to deconstruct a document into individual assets for individual check in. The assets can be displayed in a hierarchical structure to show the relationships between the assets. Information about the assets is stored in the form of metadata in headers stored in the database while the assets are stored in a file server or clusters of file servers" (Column 22, lines 49-57).

Regarding claim 38, **Gill** further teaches a content management system comprising:
A) means for assembling associated PCOs into packages intended or suggested for collective publication (Column 18, lines 1-12).

The examiner notes that **Gill** teaches **"means for assembling associated PCOs into packages intended or suggested for collective publication"** as "The Grouped mode 42 is used to display asset grouped in folder according their respective asset class, as seen in FIG. 11. The Layout and Reverse Layout mode, 44 and 45, displays the relationships between assets and classes of assets. The Header mode displays assets by listing all header fields, as in FIG. 21, or by showing the low-resolution thumbnail for each asset, as in FIG. 20. Userview mode is explained in detail below. Additionally you have two browse modes: the Relation and the Revisions mode. The Relation mode displays all relations between assets. The Revisions mode 46 displays the revisions for each of those assets" (Column 18, lines 1-12).

Regarding claim 39, **Gill** further teaches a content management system comprising:

A) means for describing the category or nature of a given PCO's relationship with its associated PCOs (Column 22, lines 49-57).

The examiner notes that **Gill** teaches **"means for describing the category or nature of a given PCO's relationship with its associated PCOs"** as "The present invention, in a preferred embodiment, allows a user to check in assets, either on an individual basis, as a group of related assets, or even to deconstruct a document into individual assets for individual check in. The assets can be displayed in a hierarchical structure to show the relationships between the assets. Information about the assets is stored in the form of metadata in headers stored in the database while the assets are stored in a file server or clusters of file servers" (Column 22, lines 49-57).

Regarding claim 40, **Gill** further teaches a content management system comprising:

A) wherein the database system comprises means for creating one or more assignments, each assignment being an administrative entity for managing one or more PCOs, the PCO(s) being planned for creation or still under creation or already existing PCO(s) (Column 8, lines 55-67-Column 9, lines 1-8).

The examiner notes that **Gill** teaches **"wherein the database system comprises means for creating one or more assignments, each assignment being an administrative entity for managing one or more PCOs, the PCO(s) being planned for creation or still under creation or already existing PCO(s)"** as "Access to header fields is regulated by "privileges". Privileges determine which users have what level of access to which assets and features. The present invention implements privileges in terms of users, roles, groups, and access control lists. A user is a logon name and a corresponding password that are registered with the Server. A role is a set of privileges that determines which assets a user can access and which commands they can use. For example, privileges for a role called "Image-Editing Technician" might allow check-in and check-out of picture files but prevent check-in or check-out of QuarkXPress layouts. An "Editor" role might allow full access to all text files, but prevent anything but read-only access to picture files. To grant the appropriate privileges to the

appropriate people, all an administrator needs to do is apply the "Image-Editing Technician" and "Editor" roles to the appropriate users. A group is simply a named list of users. Access control lists are sets of access privileges specific to a particular asset. Access control lists determine which users and groups may have what kind of access to that asset" (Column 8, lines 55-67-Column 9, lines 1-8).

Regarding claim 41, **Gill** further teaches a content management system comprising:

A) means for associating metadata with assignments (Column 8, lines 55-67-Column 9, lines 1-8).

The examiner notes that **Gill** teaches **"means for associating metadata with assignments"** as "Access to header fields is regulated by "privileges". Privileges determine which users have what level of access to which assets and features. The present invention implements privileges in terms of users, roles, groups, and access control lists. A user is a logon name and a corresponding password that are registered with the Server. A role is a set of privileges that determines which assets a user can access and which commands they can use. For example, privileges for a role called "Image-Editing Technician" might allow check-in and check-out of picture files but prevent check-in or check-out of QuarkXPress layouts. An "Editor" role might allow full access to all text files, but prevent anything but read-only access to picture files. To grant the appropriate privileges to the appropriate people, all an administrator needs to do is apply the "Image-Editing Technician" and "Editor" roles to the appropriate users. A group is simply a named list of users. Access control lists are sets of access privileges specific to a particular asset. Access control lists determine which users and groups may have what kind of access to that asset" (Column 8, lines 55-67-Column 9, lines 1-8).

Regarding claim 42, **Gill** further teaches a content management system comprising:

A) wherein at least part of the metadata associated with an assignment applies to one or more PCOs being managed through that assignment as well as to the assignment itself (Column 8, lines 55-67-Column 9, lines 1-8).).

The examiner notes that **GIll** teaches **"wherein at least part of the metadata associated with an assignment applies to one or more PCOs being managed through that assignment as well as to the assignment itself"** as "Access to header fields is regulated by "privileges". Privileges determine which users have what level of access to which assets and features. The present invention implements privileges in terms of users, roles, groups, and access control lists. A user is a logon name and a corresponding password that are registered with the Server. A role is a set of privileges that determines which assets a user can access and which commands they can use. For example, privileges for a role called "Image-Editing Technician" might allow check-in and check-out of picture files but prevent check-in or check-out of QuarkXPress layouts. An "Editor" role might allow full access to all text files, but prevent anything but read-only access to picture files. To grant the appropriate privileges to the appropriate people, all an administrator needs to do is apply the "Image-Editing Technician" and "Editor" roles to the appropriate users. A group is simply a named list of users. Access control lists are sets of access privileges specific to a particular asset. Access control lists determine which users and groups may have what kind of access to that asset" (Column 8, lines 55-67-Column 9, lines 1-8).

Regarding claim 43, **Gill** does not explicitly teach a content management system comprising:
A) wherein the <u>PCO</u> metadata comprises at least one of the following types of information relating to assignment management: an address and/or name of a geographical location of a news event, one or more people expected to attend a news event, a start time and/or end time and/or duration of a news event, one or more contacts at a news event, one or more appointments at a news event, one or more items of research information or interviews or links to such items, and a deadline.

Lebling, however, teaches **"wherein the <u>PCO</u> metadata comprises at least one of the following types of information relating to assignment management: an address and/or name of a geographical location of a news event, one or more people expected to attend a news event, a start time and/or end time and/or duration of a news event, one or more contacts at a news event, one or more appointments at a news event, one or more items of research information or interviews or links to such items, and a deadline"** as "In the main application window 30 shown in FIG. 2, the queue entitled "RUNDOWN" 35 has been selected from a folder named "630P" 37 in the directory panel 32, by the user placing the cursor over the queue name and single clicking with a mouse or other pointing device on the queue name while the directory panel is in focus. The user can then open the "RUNDOWN" queue by double-clicking on the queue name. Opening a directory in the directory panel 32 causes the queue for that file being displayed in the queue panel 34 and the focus to switch to the queue panel 34. The queue panel displays the list of stories for a particular broadcast, including format and timing information for each story. The story panel 36 displays text for the particular stories, such as the text from the story "MIDWEST DAMAGE," which is shown as selected in the queue panel 34. The text which is displayed in the story panel 36 may also be sent, via the network 26, to a teleprompter 27 to be read by the news anchorperson during the broadcast" (Column 4, lines 45-62), and "Total: indicates the total time of the story" (Column 8, line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 44, **Gill** further teaches a content management system comprising:

A) wherein the <u>PCO</u> metadata comprises at least one of the following types of information: a slug or name, a description, an origination, a type, a status, a reference to at least one <u>news media product</u>, keywords, an abstract or summary, notes, a

modification log, access control information, an originating newsroom, an originating desk, an assignment editor, an author, a deadline, and intellectual property rights (Column 7, lines 38-50).

The examiner notes that **Gill** teaches **"wherein the <u>PCO</u> metadata comprises at least one of the following types of information: a slug or name, a description, an origination, a type, a status, a reference to at least one <u>news media product</u>, keywords, an abstract or summary, notes, a modification log, access control information, an originating newsroom, an originating desk, an assignment editor, an author, a deadline, and intellectual property rights"** as "The metadata about each of the digital assets, in the preferred embodiment, is gathered in two processes. The first process is performed automatically by the Server 1 itself. The Server 1 automatically gathers information and generates the corresponding metadata on such information as file type, size, dates of creation and modification, versions, and file-type-specific information such as image resolution and word counts. Other information may be automatically generated by the Server 1 as well. The Server 1 gathers defined information that must be gathered as well as user definable information. The server administrator can configure the Server 1 to gather additional information if desired" (Column 7, lines 38-50).

Regarding claim 45, **Gill** further teaches a content management system comprising:

A) wherein the <u>PCO</u> metadata comprises at least one of the following types of information referring to a publication: a name, a <u>news media product</u> date and/or time, a revision specific edition, a geographical or topical edition, a logical or physical storage address in a computer system, a specific physical or visual placement or location within the <u>news media product</u>, a deadline a layout budget or list associated with the <u>news media product</u>, a size of the publication or within in the <u>news media product</u>, and a ranking or priority within the <u>news media product</u> (Column 7, lines 51-58).

The examiner notes that **Gill** teaches **"wherein the <u>PCO</u> metadata comprises at least one of the following types of information referring to a publication: a**

name, a <u>news media product</u> date and/or time, a revision specific edition, a
geographical or topical edition, a logical or physical storage address in a
computer system, a specific physical or visual placement or location within the
<u>news media product</u>, a deadline a layout budget or list associated with the <u>news
media product</u>, a size of the publication or within in the <u>news media product</u>, and
a ranking or priority within the <u>news media product</u>" as "The second process of
gathering the metadata is entered by the user. The user-supplied metadata may include
such information as the identity of the user, the status of the asset, category of the
asset, keywords to be applied to the asset, a text description of the asset or other
information. The Server 1 can be configured to require such information to be entered
by the user before the digital asset can be checked in" (Column 7, lines 51-58).

Regarding claim 46, **Gill** further teaches a content management system
comprising:
A) means for ensuring that <u>PCO</u> metadata <u>contains</u> only valid combinations of
information (Column 7, lines 51-58).

The examiner notes that **Gill** teaches **"means for ensuring that <u>PCO</u> metadata
<u>contains</u> only valid combinations of information"** as "The second process of
gathering the metadata is entered by the user. The user-supplied metadata may include
such information as the identity of the user, the status of the asset, category of the
asset, keywords to be applied to the asset, a text description of the asset or other
information. The Server 1 can be configured to require such information to be entered
by the user before the digital asset can be checked in" (Column 7, lines 51-58).

Regarding claim 47, **Gill** further teaches a content management system
comprising:
A) wherein the <u>PCO</u> metadata comprises at least one of the following types of
information relating to access control: permissions to view the existence of an item in
the database system, permission types and/or levels of access to an item in the

database system, and rules specifying conditions for specific permissions to take effect on an item in the database system (Column 8, lines 55-67-Column 6, lines 1-8).

The examiner notes that **Gill** teaches **"wherein the PCO metadata comprises at least one of the following types of information relating to access control: permissions to view the existence of an item in the database system, permission types and/or levels of access to an item in the database system, and rules specifying conditions for specific permissions to take effect on an item in the database system"** as "Access to header fields is regulated by "privileges". Privileges determine which users have what level of access to which assets and features. The present invention implements privileges in terms of users, roles, groups, and access control lists. A user is a logon name and a corresponding password that are registered with the Server. A role is a set of privileges that determines which assets a user can access and which commands they can use. For example, privileges for a role called "Image-Editing Technician" might allow check-in and check-out of picture files but prevent check-in or check-out of QuarkXPress layouts. An "Editor" role might allow full access to all text files, but prevent anything but read-only access to picture files. To grant the appropriate privileges to the appropriate people, all an administrator needs to do is apply the "Image-Editing Technician" and "Editor" roles to the appropriate users. A group is simply a named list of users. Access control lists are sets of access privileges specific to a particular asset. Access control lists determine which users and groups may have what kind of access to that asset" (Column 8, lines 55-67-Column 6, lines 1-8).

Regarding claim 48, **Gill** further teaches a content management system comprising:

A) wherein at least <u>a portion</u> of the <u>PCO</u> metadata <u>is</u> stored as database fields in the database system (Column 11, lines 35-48).

The examiner notes that **Gill** teaches **"wherein at least <u>a portion</u> of the <u>PCO</u> metadata <u>is</u> stored as database fields in the database system"** as "The present invention allows new header fields to be added to new and existing asset classes.

Administrators can create customized header fields for specific users or jobs using the Edit & New Header Fields menu command. Header fields can include strings, with maximal length which is a database-dependent feature, full searchable text, a date with optional range, a number with optional range, a measurement with unit and optional range, a "domain", that is an enumeration or selection of a finite set of possible values, and a set of values of one primitive field type (set of text, set of date, set of number, set of domain). If a new header field is added to an asset class that contains other asset classes, the header field is available for all assets in both classes." (Column 11, lines 35-48).

Regarding claim 49, **Gill** further teaches a content management system comprising:

A) wherein at least a portion of the PCO metadata are stored as tags and/or attributes within the PCO content data (Column 8, lines 45-54).

The examiner notes that **Gill** teaches **"wherein at least a portion of the PCO metadata are stored as tags and/or attributes within the PCO content data"** as "The present invention provides the capability for users to define and customize the headers. When users define headers, there are several attributes that can be defined. Users may define the type of data the field will contain, how the field is formatted and what the default measurement system is; whether or not the field has minimum and maximum values and, if so, what those values are. Users may also set whether users are required to enter data in the field and whether or not the value entered in that field has to be unique" (Column 8, lines 45-54).

Regarding claim 50, **Gill** further teaches a content management system comprising:

A) wherein the database system comprises means for enabling a system administrator or workstation user to define one or more additional metadata fields, thereby facilitating customised information to be stored in the database system (Column 11, lines 35-48).

The examiner notes that **Gill** teaches **"wherein the database system comprises means for enabling a system administrator or workstation user to define one or more additional metadata fields, thereby facilitating customised information to be stored in the database system"** as "The present invention allows new header fields to be added to new and existing asset classes. Administrators can create customized header fields for specific users or jobs using the Edit & New Header Fields menu command. Header fields can include strings, with maximal length which is a database-dependent feature, full searchable text, a date with optional range, a number with optional range, a measurement with unit and optional range, a "domain", that is an enumeration or selection of a finite set of possible values, and a set of values of one primitive field type (set of text, set of date, set of number, set of domain). If a new header field is added to an asset class that contains other asset classes, the header field is available for all assets in both classes." (Column 11, lines 35-48).

Regarding claim 51, **Gill** further teaches a content management system comprising:

A) wherein a set of metadata fields is definable by a system administrator or workstation user (Column 11, lines 35-48).

The examiner notes that **Gill** teaches **"wherein a set of metadata fields is definable by a system administrator or workstation user"** as "The present invention allows new header fields to be added to new and existing asset classes. Administrators can create customized header fields for specific users or jobs using the Edit & New Header Fields menu command. Header fields can include strings, with maximal length which is a database-dependent feature, full searchable text, a date with optional range, a number with optional range, a measurement with unit and optional range, a "domain", that is an enumeration or selection of a finite set of possible values, and a set of values. of one primitive field type (set of text, set of date, set of number, set of domain). If a new header field is added to an asset class that contains other asset classes, the header field is available for all assets in both classes." (Column 11, lines 35-48).

Regarding claim 52, **Gill** further teaches a content management system comprising:

A) wherein substantially all metadata fields are definable by a system administrator or workstation user (Column 11, lines 35-48).

The examiner notes that **Gill** teaches **"wherein substantially all metadata fields are definable by a system administrator or workstation user"** as "The present invention allows new header fields to be added to new and existing asset classes. Administrators can create customized header fields for specific users or jobs using the Edit & New Header Fields menu command. Header fields can include strings, with maximal length which is a database-dependent feature, full searchable text, a date with optional range, a number with optional range, a measurement with unit and optional range, a "domain", that is an enumeration or selection of a finite set of possible values, and a set of values of one primitive field type (set of text, set of date, set of number, set of domain). If a new header field is added to an asset class that contains other asset classes, the header field is available for all assets in both classes." (Column 11, lines 35-48).

Regarding claim 53, **Gill** further teaches a content management system comprising:

A) wherein a set of metadata fields is definable by the content type of a given PCO (Column 8, lines 45-54

The examiner notes that **Gill** teaches **"wherein a set of metadata fields is definable by the content type of a given PCO"** as "The present invention provides the capability for users to define and customize the headers. When users define headers, there are several attributes that can be defined. Users may define the type of data the field will contain, how the field is formatted and what the default measurement system is; whether or not the field has minimum and maximum values and, if so, what those values are. Users may also set whether users are required to enter data in the field and whether or not the value entered in that field has to be unique" (Column 8, lines 45-54).

Regarding claim 54, **Gill** does not explicitly teach a content management system comprising:

A) wherein at least some PCOs or other database items stored in the database system are associated with specific icons, thereby allowing a workstation user to identify the type of item by a visual appearance of its icon.

Lebling, however, teaches **"wherein at least some PCOs or other database items stored in the database system are associated with specific icons, thereby allowing a workstation user to identify the type of item by a visual appearance of its icon"** as "Stories or fields shown in the queue panel may be color coded. The color coding may be used to specify the status of a story or the urgency of a wire. For example, stories which were opened and viewed within a particular time frame may be shown in one color. Unviewed stories are shown in another color. If a story has been altered since the user read it, it reverts back to the unviewed story color. This distinction lasts for a length of time specified by the user, and is stored in the database. Stories which have been displayed for a predetermined amount of time in the story panel 36 are considered to have been viewed and therefore changed to the viewed story color. If stories are open for the predetermined time but unedited, the text will still change color to the viewed story color" (Column 9, lines 38-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 55, **Gill** further teaches a content management system comprising:

A) wherein changes to <u>PCO</u> metadata or changes to <u>PCO</u> content <u>data</u> are logged during a news media production workflow (Column 26, lines 26-32).

The examiner notes that **Gill** teaches **"wherein changes to <u>PCO</u> metadata or changes to <u>PCO</u> content <u>data</u> are logged during a news media production**

workflow" as "When an asset is checked in, the present invention automatically saves a new version of the asset. All versions of that assets are called revisions. A revision is saved each time an asset is checked into the present invention. The invention allows users to specify how revisions of files are maintained by using the Revision Control panel" (Column 13, lines 24-30).

Regarding claim 56, **Gill** further teaches a content management system comprising:
A) wherein automation rules defined by system administrators or by workstation users enable triggering of automatic actions based on changes to metadata values or changes to content associated with PCOs (Column 20, lines 8-20).

The examiner notes that **Gill** teaches **"wherein automation rules defined by system administrators or by workstation users enable triggering of automatic actions based on changes to metadata values or changes to content associated with PCOs"** as "An action folder 48 is created from the User View palette by selecting the Action Folder button 49, shown in FIG. 16. An Action Folder dialog box 51, shown in FIG. 17, is then displayed. An action folder is configured by selecting the Activity tab 52, and specifying a schedule for the running of the Action Folder's script. The schedule can designate that the activity operate only one at a specified time or to execute periodically at a specified periodic date and time, or both. The Action Folder can also be configured to execute the activity on any file contained within a specified folder on a local hard disk. The Monitor File System is selected and the folder to be monitored is specified. Then the activity will be executed on any file placed within the specified folder" (Column 20, lines 8-20).

Regarding claim 57, **Gill** further teaches a content management system comprising:
A) wherein <u>an action selected from the group consisting</u> one notifying or alerting users, triggering workflow events, triggering user specified actions, triggering automatic

archival or purging, and triggering a routing of PCOs or other database items is

triggered when the condition of an automation rule is met (Column 20, lines 8-20)

The examiner notes that **Gill** teaches **"wherein <u>an action selected from the</u>**

<u>group consisting</u> one notifying or alerting users, triggering workflow events,

triggering user specified actions, triggering automatic archival or purging, and

triggering a routing of PCOs or other database items is triggered when the

condition of an automation rule is met" as "An action folder 48 is created from the

User View palette by selecting the Action Folder button 49, shown in FIG. 16. An Action

Folder dialog box 51, shown in FIG. 17, is then displayed. An action folder is configured

by selecting the Activity tab 52, and specifying a schedule for the running of the Action

Folder's script. The schedule can designate that the activity operate only one at a

specified time or to execute periodically at a specified periodic date and time, or both.

The Action Folder can also be configured to execute the activity on any file contained

within a specified folder on a local hard disk. The Monitor File System is selected and

the folder to be monitored is specified. Then the activity will be executed on any file

placed within the specified folder" (Column 20, lines 8-20).

Regarding claim 58, **Gill** does not explicitly teach a content management system

comprising:

A) wherein production and/or publication of media output using the PCOs stored in the

database system is facilitated by one or more production systems integrated with the

database system.

Lebling, however, teaches **"wherein production and/or publication of media**

output using the PCOs stored in the database system is facilitated by one or

more production systems integrated with the database system" as "In addition,

news story information typically must be available on a wide variety of distribution

means, such as video playback devices and teleprompters. The graphical user interface

of the present invention allows quick and easy access to the hundreds of news storied

that are received daily in a typical newsroom. The stories can be entered, viewed and

edited, and news broadcasts can be produced. The present invention enables users to

insert machine code within the text of the news story to control video playback devices and teleprompter during broadcasts" (Column 13, line 67-Column 14, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 59, **Gill** does not explicitly teach a content management system comprising:

A) wherein PCOs or at least some metadata associated with PCOs stored in the database system are accessible from a production system.

Lebling, however, teaches **"wherein PCOs or at least some metadata associated with PCOs stored in the database system are accessible from a production system"** as "In addition, news story information typically must be available on a wide variety of distribution means, such as video playback devices and teleprompters. The graphical user interface of the present invention allows quick and easy access to the hundreds of news storied that are received daily in a typical newsroom. The stories can be entered, viewed and edited, and news broadcasts can be produced. The present invention enables users to insert machine code within the text of the news story to control video playback devices and teleprompter during broadcasts" (Column 13, line 67-Column 14, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

Regarding claim 60, **Gill** further teaches a content management system comprising:

A) wherein PCOs or at least some status or production data or other metadata from a production system are accessible from the content management system (Column 14, lines 10-17).

The examiner notes that **Gill** teaches **"wherein PCOs or at least some status or production data or other metadata from a production system are accessible from the content management system"** as "The dialog box also displays the Asset Status for each of the items, that is the check-out status for each of the items, the type of item, and other information such as the size of the file, the last date of modification and the physical location of the item within the document. Other information could be displayed as well as desired" (Column 14, lines 10-17).

Regarding claim 61, **Gill** further teaches a content management system comprising:

A) wherein the news media product includes at least one member selected from the group consisting of newspapers, news magazines, video newscasts, audio newscasts, streaming newscasts, websites, mobile devices and wire services (Column 19, lines 27-33).

The examiner notes that **Gill** teaches **"wherein the news media product includes at least one member selected from the group consisting of newspapers, news magazines, video newscasts, audio newscasts, streaming newscasts, websites, mobile devices and wire services"** as "An example of a user view is illustrated in FIG. 16. Let us suppose an user, such as an image-editing technician, who is required to color correct a number of images that are being used in a variety of magazines within a publishing company. The only common relationship between these images is that the user must color correct them. There is no other relationship between these images or assets" (Column 19, lines 27-33).

Regarding claim 62, **Gill** does not explicitly teach a content management system comprising:

A) wherein coordinating the expected usage of the PCO within the news media product further comprises: adapting the expected usage in response to modification of the PCO metadata or PCO content to obtain an updated expected usage; and

B) converting an updated expected usage to determine an actual usage of the PCO content data within the news media product.

Lebling, however, teaches **"wherein coordinating the expected usage of the PCO within the news media product further comprises: adapting the expected usage in response to modification of the PCO metadata or PCO content to obtain an updated expected usage"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time from the beginning of the broadcast may also be displayed. Backtimes

and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67-Column 10, lines 1-29), and **"converting an updated expected usage to determine an actual usage of the PCO content data within the news media product"** as "Users with write privileges may directly edit story fields without having to open the story. This is done by selecting the "Edit" option in the pulldown menu bar 38 and selecting the "Replace" mode. The user may also be able to select the replace mode by clicking on a button in tool bar 40. Selecting the Replace mode enables the user to edit the story displayed in the story panel 36 or to edit the different fields shown in the queue panel 34. Selecting the Replace mode from the pulldown menu or the tool bar when in the Replace mode causes the system to exit the Replace mode. Once the desired edits have been made in the selected story in the queue panel 34, the edits may be saved by selecting the save option from the pulldown menu 38 or by clicking on the "Save" icon in tool bar 40. Saving the contents of the Replace window automatically changes the focus back to the queue panel 34. The user may then select another story to edit, using the mouse or the keyboard. When another story has been selected, the focus is switched back to a Replace window and the story information is downloaded to the Replace window for editing. Pressing function key 7 (F7) while the focus is on the Replace window automatically selects and downloads the template of the next story in queue panel 34. If the contents of the "Replace" Window have been modified, the template will be saved before downloading the next story. In the example shown in FIG. 2, queues with a name of RUNDOWN are queues which include a listing of the order of the stories for a particular broadcast. Rundown queues may include a field entitled "Backtime." Backtime is based on calculation backwards from a specified point in the broadcast, such as the end of the broadcast. Optionally, a cumulative time

from the beginning of the broadcast may also be displayed. Backtimes and cumulative times are used to determine if the stories planned for a broadcast "fit" within the start and end times of the broadcast and within the breaks during the broadcast. Stories in the queue which do not fit are highlighted, and their elapsed times may be adjusted to make the story fit. The story also may be "floated", which means that the story is temporarily removed from the broadcast. The floated story then is either highlighted in the queue in a color which indicates that it is floating, or the story is moved within the queue to a point in the rundown after the end of the broadcast" (Column 9, lines 56-67- Column 10, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Lebling's** would have allowed **Gill's** to provide a method to improve coordination of modifications to parts of a news story, as noted by **Lebling** (Column 1, lines 36-39).

10.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gill et al.** (U.S. Patent 6,181,336), and in view of **Lebling et al.** (U.S. Patent 6,141,007) as applied to claims 1-2, and 5-62 and in view of **Nasr et al.** (U.S. Patent 6,263,332).

11.   Regarding claim 3, **Gill** and **Lebling** do not explicitly teach a content management system comprising:

A) wherein the <u>PCO content data is</u> arranged to be media neutral by storing or managing them using an XML based structure.

Nasr, however, teaches **"wherein the <u>PCO content data is</u> arranged to be media neutral by storing or managing them using an XML based structure"** as "information retrieval and in particular to a query and transformative engine applicable to eXtensible Markup Language (**XML**) documentation" (Column 1, lines 6-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Nasr's** would have allowed **Gill's** and **Lebling's** to provide a method have a standardized markup language to store and present documents to requesting users, as noted by **Nasr** (Column 8, lines 55-58).

Response to Arguments

12.   Applicant's arguments with respect to claims 1-3, and 5-62 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,052,514 issued to **Gill et al.** on 18 April 2000. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

U.S. Patent 6,345,256 issued to **Millstead et al.** on 05 February 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

U.S. Patent 6,181,336 issued to **Chiu et al.** on 30 January 2001. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

U.S. Patent 6,163,510 issued to **Lee et al.** on 19 December 2000. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

U.S. Patent 5,115,310 issued to **Takano et al.** on 19 May 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

U.S. Patent 6,366,918 issued to **Guttman et al.** on 02 April 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "CCI Europe ALL in One Editorial System", dated October 1997, TechNews, Volume 3, Number 5). The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "Morning News orders 600-seat CCI system", dated November 1998, by Mike Tartar. The subject matter disclosed therein is pertinent to that of claims

1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "NEXPO 97: Single Footprint Editorial Workstation from CCI Europe", dated April 1997, by Nexpo. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "The CCI NewsDesk Editorial System" by **CCI**. Dated 02/09/1998. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "CCI in Phoenix: 1100 pages a week and only a few problems", by **Bryan**, dated May 1997. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Article entitled "Adobe InDesign", by **Adobe**, dated 06 April 1999. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-62 (e.g., methods to provide a distributed publishing access database system).

Contact Information

14.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.
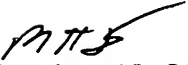
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi

Patent Examiner

Art Unit 2168

October 12, 2007

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